Project Name: PACKAGE 1 8-17-2011 Description: S LINE Horizontal Alignment Name: S LINE SOUTH Description: Centerline of Right Track (SB) Style: Default STATION NORTHING EASTING Element: Linear 10270+10.29 POB ( ) 2202746.35 6278413.79 10270+10.29 10333+91.57 S 39^14'30" E TS ( ) 10333+91.57 2197804.15 6282450.54 Tangent Direction: Tangent Length: 6381.28 Element: Cosine TS ( 10333+91.57 2197804.15 6282450.54 10347+96.93 2196715.72 6283339.56 SPI ( SPI ( ) 10353+91.57 2196268.78 6283732.02 Entrance Radius: 0.00 28016.50 Exit Radius: Length: Angle: 2000.00 2<sup>02</sup>'42" Left Constant:
Long Tangent:
Short Tangent:
Long Chord: Constant: 7485.52 1405.36 594.79 1999.88 1999.77 Ys: 21.23 P: 3.38 K: 999.98 Tangent Direction: S 39<sup>14</sup>'30" E
Radial Direction: S 50<sup>45</sup>'30" W
Chord Direction: S 39<sup>50</sup>'59" E
Radial Direction: S 48<sup>42</sup>'48" W S 41<sup>1</sup>7'12" E Tangent Direction: Element: Circular 10353+91.57 2196268.78 6283732.02 10373+68.27 2194783.46 6285036.30 2214754.86 6304784.08 10393+38.42 2193495.99 6286536.21 PI ( CC ( CS ( Radius: 28016.50 8<sup>04</sup>'18" Left Delta: 0^12'16" Degree of Curvature (Arc): Length: 3946.85 Tangent: 1976.70 Chord: 3943.59 Middle Ordinate: 69.47 69.65
Rangent Direction: S 41^17'12" E
Radial Direction: S 48^42'48" W
Chord Direction: S 45^19'21" E
Radial Direction: S 40^38'30" W
Cangent Direction: S 49^21'20" = External: 69.65 Tangent Direction: Tangent Direction: Element: Cosine 10393+38.422193495.996286536.2110399+33.212193108.596286987.53 CS ( SPI ( ST ( 10413+38.42 2192231.88 6288085.91 28016.50 Entrance Radius: Exit Radius: 0.00 2000.00 Length: 2<sup>02</sup>'42" Left Angle: Constant: 7485.52 Long Tangent: 1405.36 Short Tangent: 594.79 1999.88 Long Chord: 1999.77 Xs: Ys: 21.23 P: 3.38 K: 999.98 S 49<sup>21</sup>'30" E S 40<sup>38</sup>'30" W S 50<sup>47</sup>'43" E S 38<sup>35</sup>'48" W Tangent Direction: Radial Direction: Chord Direction: Radial Direction: Tangent Direction: S 51<sup>2</sup>4'12" E Element: Linear 6288085.91 10413+38.42 2192231.88 ST(

10544+19.91

2184071.22

6298309.85

TS

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Tangent Direction: S 51^24'12" E Tangent Length: 13081.49
Element: Cosine
                                   TS ( ) 10544+19.91 2184071.22 6298309.85

SPI ( ) 10552+63.09 2183545.22 6298968.84

SC ( ) 10556+19.91 2183320.23 6299245.81

Entrance Radius: 0.00

Exit Radius: 70000.00

Length: 1200.00

Angle: 0^29'28" Right

Constant: 9165.15

Long Tangent: 843.17

Short Tangent: 356.83

Long Chord: 1200.00

Xs: 1199.99

Ys: 3.06
                                                                                                                                            3.06
                                                                                 Ys:
                            rs: 3.06
P: 0.49
K: 600.00
Tangent Direction: S 51^24'12" E
Radial Direction: S 38^35'48" W
Chord Direction: S 51^15'27" E
Radial Direction: S 39^05'16" W
Tangent Direction: S 50^54'44" E
   lement: Circular

SC ( ) 10556+19.91 2183320.23 6299245.81
PI ( ) 10562+21.13 2182941.16 6299712.45
CC ( ) 2128987.48 6255110.19
CS ( ) 10568+22.31 2182554.13 6300172.52

Radius: 70000.00
Delta: 0^59'03" Right

Degree of Curvature(Arc): 0^04'55"

Length: 1202.39
Tangent: 601.21
Chord: 1202.38
Middle Ordinate: 2.58
External: 2.58
Tangent Direction: S 50^54'44" E
Radial Direction: S 39^05'16" W
Chord Direction: S 50^25'13" E
Radial Direction: S 40^04'19" W
Tangent Direction: S 49^55'41" E
Element: Circular
                            Cosine

CS ( ) 10568+22.31 2182554.13 6300172.52
SPI ( ) 10571+79.14 2182324.42 6300445.59
ST ( ) 10580+22.31 2181776.12 6301086.14

Entrance Radius: 70000.00
Exit Radius: 0.00
Angle: 0^29'28" Right

Constant: 9165.15
Long Tangent: 843.17
Short Tangent: 356.83
Long Chord: 1200.00
Xs: 1199.99
Ys: 3.06
P: 0.49
K: 600.00

Tangent Direction: S 49^55'41" E
Radial Direction: S 49^34'59" E
Radial Direction: S 49^34'59" E
Radial Direction: S 49^26'13" E
Element: Cosine
Element: Linear
                            ST ( ) 10580+22.31
TS ( ) 10593+55.51
Tangent Direction: S 49^26'13" E
Tangent Length: 1333.20
                                                                                                                                                                  2181776.12 6301086.14
2180909.17 6302098.96
Element: Cosine
                                           TS ( ) 10593+55.51 2180909.17 6302098.96

SPI ( ) 10607+60.87 2179995.28 6303166.60

SC ( ) 10613+55.51 2179592.62 6303604.36
                                    Entrance Radius: 0.00
Exit Radius: 28000.00
                                                                                                                         2000.00
                                                                   Length:
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^02'47" Right
                                          Angle:
                                                                             7483.31
                                    Constant:
                         Long Tangent:
Short Tangent:
Long Chord:
                                                                             1405.36
                                                                              594.79
                                                                            1999.88
                                                                             1999.77
                                                Ys:
                                                                                 21.24
                                                  P:
                                                                                    3.38
                                                  K:
                                                                                999.98
                 Tangent Direction: S 49^26'13" E
Radial Direction: S 40^33'47" W
Chord Direction: S 48^49'43" E
Radial Direction: S 42^36'33" W
Tangent Direction: S 47^23'27" E
Element: Circular

      10613+55.51
      2179592.62
      6303604.36

      10624+10.92
      2178878.11
      6304381.12

      2158984.95
      6284648.51

      10634+65.32
      2178107.16
      6305101.90

                                                                     10613+55.51
                            SC (
                            PI (
  CC ( )
CS ( )
Radius:
Delta:
Degree of Curvature(Arc):
Length:
Tangent:
                                                                          28000.00
                                                                           4^19'02" Right 0^12'17"
                                                                             2109.81
                                                                             1055.41
                                          Chord:
                                                                              2109.31
                     Middle Ordinate:
                                                                                  19.87
                                   External:
                                                                                  19.88
                 External: 19.88
Tangent Direction: S 47^23'27" E
Radial Direction: S 42^36'33" W
Chord Direction: S 45^13'56" E
Radial Direction: S 46^55'35" W
Tangent Direction: S 43^04'25" E
Element: Cosine
                                                                  10634+65.32 2178107.16 6305101.90
10640+60.11 2177672.68 6305508.10
10654+65.32 2176612.48 6306430.60
                           CS (
                     ST ( )
ST ( )
Entrance Radius:
Exit Radius:
                                                                     28000.00
                         Exit Radius:
Length:
Angle:
Constant:
Long Tangent:
Short Tangent:
                                                                                     0.00
                                                                            2000.00
                                                                          2<sup>02'47</sup> Right
                                                                             7483.31
                                                                            1405.36
                                                                              594.79
                                                                            1999.88
                                Long Chord:
                                                Xs:
                                                                            1999.77
                                                Ys:
                                                                                21.24
                                                  P:
                                                                                    3.38
                                                  K:
                                                                               999.98
                 K: 999.98
Tangent Direction: S 43^04'25" E
Radial Direction: S 46^55'35" W
Chord Direction: S 41^38'09" E
Radial Direction: S 48^58'22" W
Tangent Direction: S 41^01'38" E
Element: Linear
                 ST ( ) 10654+65.32
POE ( ) 10806+00.00
Tangent Direction: S 41^01'38" E
Tangent Length: 15134.68
                                                                                                     2176612.48 6306430.60
                                                                                                     2165194.92
                                                                                                                                6316365.27
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